Elytra, Tokyo, **32** (1): 35–40, May 31, 2004

A New *Colpodes* (Coleoptera, Carabidae) from West Japan, with a Redescription of *Colpodes sataensis*

Seiji Morita

Higashi-gotanda 5–19–7, Shinagawa-ku, Tokyo, 141–0022 Japan

Abstract A new platynine carabid beetle, *Colpodes* (*Achaetoprothorax*) *adachii* Morita, sp. nov., is described from West Japan. The male genital organ of *C.* (*A.*) *sataensis* (Habu) is described and illustrated for the first time.

The main purpose of the present paper is to introduce a new species of the subgenus *Achaetoprothorax* (Habu, 1978, p. 255) into science. The specimens of the new species used for this study were found from the Danjo Islands lying on the East China Sea. At this opportunity, the male genital organ of *Colpodes* (*Achaetoprothorax*) *sataensis* (Habu) (1954, p. 17) from southern Kyushu is described and illustrated for the first time.

The abbreviations used herein are as follows: L – body length, measured from apical margin of clypeus to apices of elytra; HW – greatest width of head; PW – greatest width of pronotum; PL – length of pronotum, measured along the mid-line; PA – width of pronotal apex; PB – width of pronotal base; EW – greatest width of elytra; EL – greatest length of elytra; WL – greatest length of hind wing; FL – length of metafemur; ML – length of metatrochanter; TL – length of hind tarsus; M – arithmetic mean; NSMT – National Science Museum (Nat. Hist.), Tokyo.

I wish to express my deep gratitude to Dr. Shun-Ichi Uéno of the National Science Museum (Nat. Hist.), Tokyo, for critically reading the original manuscript of this paper. My thanks are also due to Messrs. Kazuo Adachi, Fuminori Hirokawa, Nobuyuki Narukawa, Masaharu Noda, Masahiro Saitô and Shigeo Tsuyuki for supplying me with important material.

Colpodes* (*Achaetoprothorax*) *adachii Morita, sp. nov.

[Japanese name: Adachi-hirata-gomimushi]

(Figs. 1–4)

Diagnosis. Elytra with weak bluish lustre; postangular seta of pronotum present, but the anterior one is lacking; elytra oval; elytral apices without emargination at the outside of triangular apical tooth on each side; elytral striae crenulate; apical part of aedeagus narrowly produced in dorsal view.

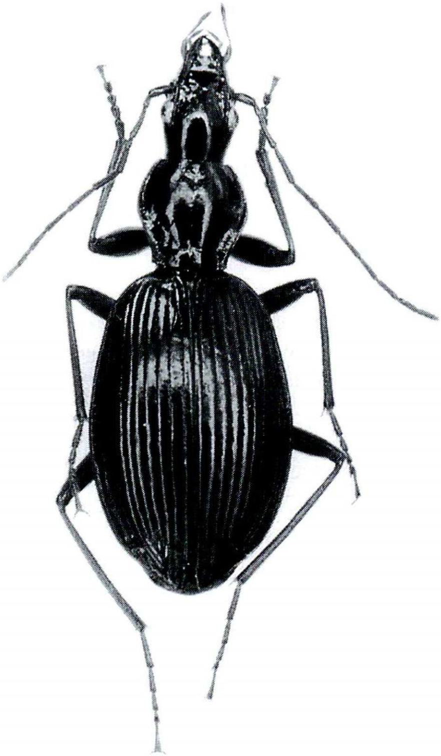
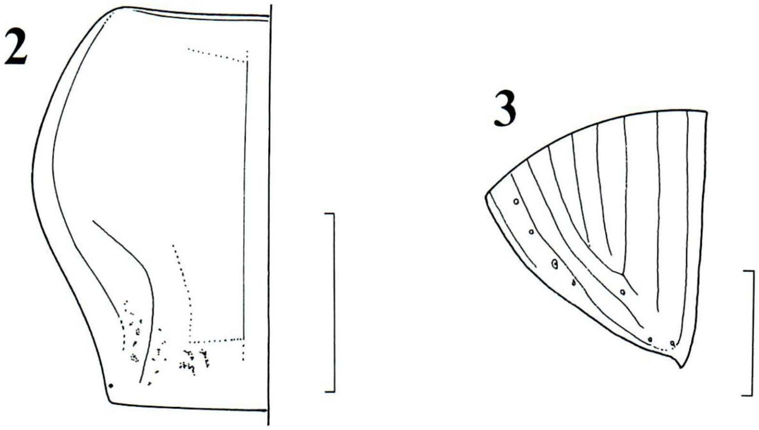


Fig. 1. *Colpodes* (*Achaetoprothorax*) *adachii* MORITA, sp. nov., from Oshima Is.

Description. L: 9.5–11.0 mm. Colour blackish brown; elytra with weak bluish lustre; ventral side blackish brown; mouth parts and appendages brown, but the femora are more or less darker than the tarsi and tibiae.

Head narrow and moderately convex; frontal furrows usually rather shallow, rarely deep, divergent posteriad and usually reaching anterior supraorbital pore, or rarely close to the pore on each side; lateral grooves deep, straight and becoming shallower posteriad, and arcuate outwards along the posterior margin of eyes on each side; anterior supraorbital pore situated a little before the mid-eye level on each side, posterior one situated at a level slightly before neck constriction; eyes moderately convex; PW/HW 1.35–1.42 (M 1.39) in 8♂♂, 1.40 in 1♀; genae a little convex; mentum tooth strongly produced and simply rounded at apex; apex of labrum almost straight or slightly emarginate; mandibles very long and strongly hooked at apices; microsculpture composed of wide or isodiametric meshes; relative lengths of antennal segments as follows:— I : II : III : IV : V : VI : XI≒1 : 0.53 : 1.47 : 1.62 : 1.44 : 1.33 : 1.16 in 8♂♂; antennal segment I with a long seta on dorsal side; segment II with a short seta on ven-



Figs. 2–3. *Colpodes* (*Achaetoprothorax*) *adachii* MORITA, sp. nov., from Oshima Is. —— 2, Left side of pronotum; 3, apical part of left elytron. (Scale: 1 mm.)

tral side; segment III with three to six setae at apical part.

Pronotum narrow, convex and widest at about middle or a little before the middle; PW/PL 1.06–1.13 (M 1.09) in 8♂♂, 1.15 in 1♀, PW/PA 1.61–1.68 (M 1.64) 8♂♂, 1.64 in 1♀, PW/PB 1.44–1.55 (M 1.50) in 8♂♂, 1.47 in 1♀, PA/PB 0.87–0.93 (M 0.91) in 8♂♂, 0.90 in 1♀; apex slightly emarginate or almost straight, and bordered throughout; sides usually moderately arcuate, or rarely very obtusely angulate at the widest part, and then very shallowly sinuate a little before hind angles; reflexed sides narrow near apical angles, becoming wider posteriad, and merging into basal fovea on each side; base weakly arcuate; apical angles slightly produced and rounded at the tips; anterior marginal setae lacking; postangular setae situated a little before hind angles on each side; median line strongly impressed, and reaching neither apex nor base; basal foveae rather deep, and with several coarse punctures; basal part convex, and usually smooth, or rarely coarsely and sparsely punctate; posterior transverse impression very shallow; hind angles either rectangular or obtuse; microsculpture composed of fine transverse meshes.

Elytra oval, strongly convex, and ample in apical parts; basal part narrow; shoulders indistinct and widely rounded; WL/EL 0.16, 0.24 in 2♂♂; EW/PW 1.78–1.85 in 8♂♂, 1.77 in 1♀, EL/EW 1.46–1.53 (M 1.50) in 8♂♂, 1.50 in 1♀; epipleuron gradually narrowed towards apex; inner plica indistinct; apices separated from each other, and without emargination at the outside of triangular apical tooth on each side; basal border moderately arcuate; basal pore situated at the proximal part of stria 1; intervals slightly convex; striae rather deep throughout, crenulate and becoming obsolete towards apices; scutellar striole situated on interval I and joining basal border; interval III with three pores, the first pore joining stria III, the second and third joining stria II; the first pore at 1/6–1/4, the second at 4/9–3/5, and the third at 2/3–3/4 from base, respectively; marginal series composed of 18 or 19 pores; microsculpture consisting of fine transverse meshes; apical pore(s) very weak and usually two in number, inner pore situated at the apex of interval II, sometimes lacking, outer pore joining apical part of stria 7 or close to the stria; subapical pore single on each side.

Gula with fine transverse wrinkles; prepisternum rarely with several coarse punctures at basal part; apical part of mesosternum, mesepisternum, and side of sternite II coarsely punctate; anal sternite (VII) narrowly produced and finely bordered throughout in ♂, widely arcuate in ♀.

Legs slender; meso- and metatarsi I–IV each with inner and outer sulci on dorsal side; claw segment of meso- and metatarsi smooth on ventral side; outer lobe of segment IV of metatarsus slightly longer than the inner one; TL/HW 1.33–1.46 (M 1.40) in 8♂♂; metatrochanter short, and with widely rounded apex; ML/FL 0.29–0.31 (M 0.30) in 8♂♂, 0.29 in 1♀; metafemora with three setae on each side in ventral view.

Aedeagus elongate and moderately arcuate in lateral view; basal part rather large; apical lobe moderately produced and simply rounded in dorsal view; right paramere with elongate basal part. Apical styli wide as in *C.* (*A.*) *hirashimai*, and with two short spines.

Variation of apical and subapical pores on elytral apices. Of the 13 specimens of the type series, 5♂♂ from Oshima and 2♂♂ and 1♀ from Meshima have two apical pores on each side. In 3♂♂ and 1♀ from Oshima, inner apical pore is lacking.

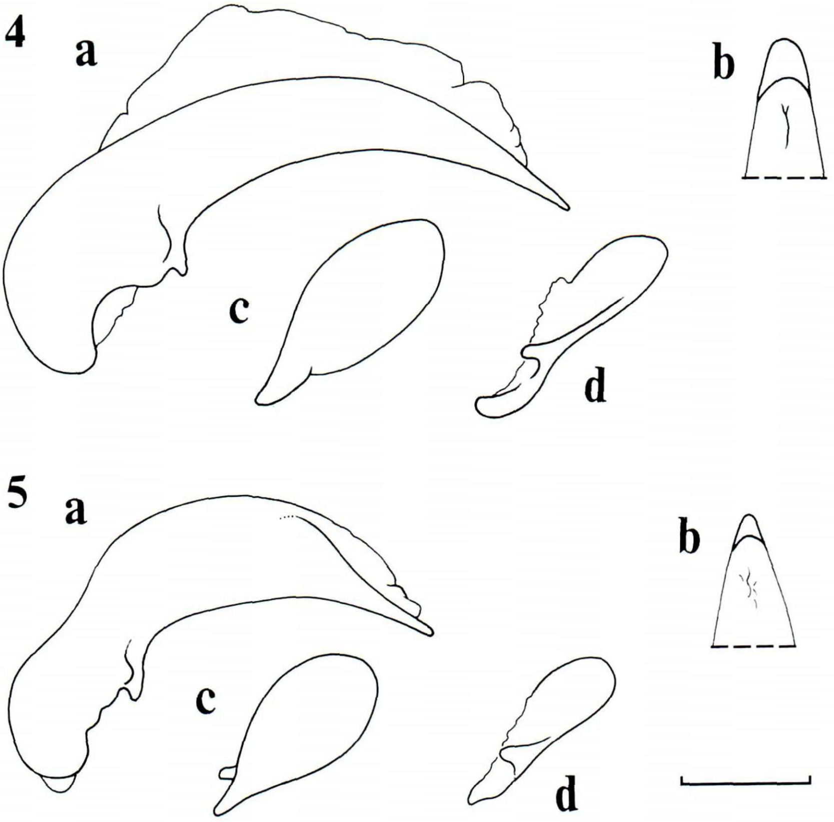
In 1♀ from Meshima, the right elytron is aberrant: an inner apical pore is lacking; an outer apical pore and a subapical one are present; an additional pore is present between the apical pore and the subapical one.

Type series. Holotype: ♂, Oshima, 5–V–2000, K. ADACHI leg. (NSMT). Paratypes: 1♀, Oshima, 7–V–1995, K. ADACHI leg.; 6♂♂, Oshima, 5–V–1997, K. ADACHI leg.; 2♂♂, Oshima, 26–V–1999, T. MATSUO leg.; 2♀♀, Meshima, 25–V–1999, T. MATSUO leg.; 1♂, Meshima, 27–V–1999, T. MATSUO leg.

Localities of the type series. The Islands of Oshima (type locality) and Meshima of the Danjo Islands lying on the East China Sea, West Japan.

Notes. This new species is closely allied to *Colpodes* (*Achaetoprothorax*) *hirashimai* (HABU) (1954, p. 19), but is distinguished from the latter by the following points:— 1) smaller body; 2) wider pronotum (cf. PW/PL, EW/PW); 3) presence of postangular setae of pronotum; 4) shorter elytra (cf. EL/EW); 5) elytral apices without emargination at the outside of tooth; and 6) apical part of aedeagus narrowly produced in dorsal view. [In *Colpodes* (*Achaetoprothorax*) *hirashimai* (HABU) from Yaku-shima Is., L: 10.4–11.5 mm; PW/HW 1.19 in 1♂, 1.17–1.24 (M 1.20) in 5♀♀; PW/PL 0.88 in 1♂, 0.88–0.91 (M 0.89) in 5♀♀; PW/PA 1.56 in 1♂, 1.51–1.62 (M 1.55) in 5♀♀; PW/PB 1.37 in 1♂, 1.31–1.36 (M 1.32) in 5♀♀; EW/PW 1.98 in 1♂, 1.91–2.00 (M 1.97) in 5♀♀; EL/EW 1.68 in 1♂, 1.64–1.74 (M 1.66) in 5♀♀.]

The standard ratios of body parts in the Meshima population are as follows: PW/HW 1.38 in 1♂, 1.41, 1.41 in 2♀♀; PW/PL 1.10 in 1♂, 1.07, 1.12 in 2♀♀; PW/PA 1.65 in 1♂, 1.63, 1.65 in 2♀♀; PW/PB 1.45 in 1♂, 1.43, 1.48 in 2♀♀; PA/PB 0.88 in 1♂, 0.88, 0.90 in 2♀♀; EW/PW 1.75 in 1♂, 1.93, 1.81 in 2♀♀; EL/EW1.55 in 1♂,



Figs. 4–5. Male genital organ of *Colpodes* spp. —— 4, *Colpodes* (*Achaetoprothorax*) *adachii* MORITA, sp. nov., from Oshima Is.; 5, *C.* (*A.*) *sataensis* (HABU) from Sanuta. —— a, Aedeagus, left lateral view; b, apical part of aedeagus, dorsal view; c, left paramere, left lateral view; d, right paramere, left lateral view. (Scale: 0.5 mm.)

1.47, 1.53 in 2♀♀; ML/FL 0.29 in 1♂, 0.29, 0.29 in 2♀♀; TL/HW 1.44 in 1♂, 1.46 in 1♀.

Colpodes* (*Achaetoprothorax*) *sataensis (HABU)

[Japanese name: Sata-hirata-gomimushi]

(Fig. 5)

Agonum (s. lat.) *sataense* HABU, 1954, Kontyû, Tokyo, **22**: 17, fig. 1; type locality: Magome, Sata.

Agonum (*Achaetoprothorax*) *sataense*: HABU, 1978, Fn. Japon., Carab. Platyn., pp. 35, 257, 259, pl. 23, fig. 4, figs. 480, 506–513.

Other references are omitted.

Redescription based on a male specimen. L: 9.5 mm; PW/HW 1.38; PW/PL 1.03; PW/PA 1.83; PW/PB 1.43; PA/PB 0.78; EW/PW 1.75; WL/EL 0.30; EL/EW

1.56; TL/HW 1.68; genital organ small in contrast to the body length; aedeagus moderately arcuate and high at about middle in lateral view; basal part with a short sagittal aileron; apical lobe short and simply rounded in dorsal view; right paramere with short basal part; left one rather wide.

Specimen examined. 1♂, Sanuta, Uchinoura-chô, Kagoshima Prefecture, West Japan, 2–V–1991, M. SAITÔ leg.

要　約

森田誠司：西日本産ヒラタゴミムシの1新種とサタヒラタゴミムシの雄交尾器．—— 東シナ海の孤島，男女群島からヒラタゴミムシの1新種，アダチヒラタゴミムシ *Colpodes* (*Achaetoprothorax*) *adachii* MORITA, sp. nov. を記載した．この種は，屋久島の固有種，ヤクシマヒラタゴミムシ *C.* (*A.*) *hirashimai* (HABU) に近縁であるが，体形などでいちじるしく異なるほか，陰茎先端部の形なども明瞭に異なる．この機会に，同じ亜属に属するサタヒラタゴミムシ *C.* (*A.*) *sataensis* (HABU) の雄の交尾器を記載し図示した．

References

HABU, A., 1954. Two new and one rare *Agonum*-species preserved in the collection of the Entomological Laboratory of Kyushu University (Coleoptera, Carabidae). *Kontyû, Tokyo*, **22**: 17–22.

——— 1978. Carabidae: Platynini (Insecta: Coleoptera). *Fauna Japonica*. viii+447 pp., 36 pls. Keigaku Publ., Tokyo.

TANAKA, K., 1985. Carabidae (Pterostichinae, Zabrinae). *In* UÉNO, S.-I., Y. KUROSAWA & M. SATÔ (eds.), *The Coleoptera of Japan in Color*, **2**: 104–139 [incl. pls. 20–25]. Hoikusha, Osaka. (In Japanese, with English book title.)